Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

1-24. (Cancelled)

25. (New) A composition comprising a photoinitiator and a sililic acid polycondensate, wherein the sililic acid polycondensate is produced by a process comprising condensing one or more organically modified silanediols of the general formula I

$Ar_2Si(OH)_2$ (I)

with one or more organically modified silanes of the general formula II

$RSi(OR')_3$ (II),

wherein said condensing is performed without adding water, wherein said silanediols of the general formula I to said silanes of the general formula II is 1:1, wherein up to 90 mole percent of said silane of the general formula II is optionally replaced by one or more co-condensable compounds selected from the group consisting of boron compounds, aluminum compounds, silicon compounds, germanium compounds, titanium compounds and zirconium compounds, and wherein

Ar is a radical comprising 6 to 20 carbon atoms and one or more aromatic groups,

R is an organic radical comprising 2 to 15 carbon atoms and one or more epoxy groups or one or more C=C double bonds,

R' is methyl or ethyl,
wherein said photoinitiator is present in said composition in a quantity effective for photochemical curing via UV.

26. (New) The composition of claim 25, wherein said one or more co-condensable compounds comprise compounds of the general formula III,

$M(OR'')_3$ (III),

wherein M is boron or aluminum, R" is an alkyl radical comprising 1 to 4 carbon atoms, and wherein said silanediols of the general formula I, said silanes of the general formula (II) and said compounds of the general formula (III) are present in the composition in a molar ratio (I):(II):(III) = $1:(1-x_{III}):2/3x_{III}$, wherein x_{III} is greater than 0 and less or equal than 0.9.

27. (New) The composition of claim 26, wherein x_{III} is greater than 0 and less or equal than 0.8.

28. (New) The composition of claim 26, wherein said compounds of the general formula III are condensation catalysts in said condensing.

29. (New) The composition of claim 25, wherein said one or more co-condensable compounds compise compounds of the general formula IV

$M'(OR")_3$ (IV),

wherein M' is silicon, germanium, titanium or zirconium, R" is an alkyl radical comprising 1 to 4 carbon atoms, and wherein said silanediols of the general formula I, said silanes of the general formula (II) and said compounds of the general formula (IV) are present in the composition in a molar ratio (I):(II):(IV) = $1:(1-x_{IV}):1/2x_{IV}$, wherein x_{IV} is greater than 0 and less or equal than 0.9.

30. (New) The composition of claim 29, wherein x_{IV} is greater than 0 and less or equal than 0.8.

31. (New) The composition of claim 29, wherein said compounds of the general formula IV are condensation catalysts in said condensing.

32. (New) The composition of claim 25, wherein said one or more co-condensable compounds comprise compounds of the general formula V:

$R_1Si(OR')_3$ (V),

wherein

R_1 is methyl or ethyl;

R_1 is selected from a group consisting of CF_3-$(CF_2)_n$-C_2H_4; R_2HN-$(CH_2)_3$-; C_2H_4-NHR_2; H_2N-C_2H_4-NH-CH_2-C_6H_4-C_2H_4; substituted and unsubstituted alkyl comprising 1 to 8 carbon atoms; and substituted and unsubstituted phenyl, totyl and naphtyl,

wherein n is an interger from 0 to 7, wherein R_2 is H, CH_3 or C_2H_5, wherein R_1 optionally comprises one or more SH groups, one or more $N(R^*)_2$ groups or a combination thereof, wherein R^* is hydrogen or alkyl,

and wherein said silanediols of the general formula (I), said silanes of the general formula (II) and said compounds of the general formula (V) are present in the composition in a molar ratio (I):(II):(V) = $1:(1-x_V):(x_v)$, wherein x_V is more than 0 and less or equal than 0.9.

33. (New) The composition of claim 32, wherein said compounds of the general formula V are condensation catalysts in said condensing.

34. (New) The composition of claim 32, wherein x_V is greater than 0 and less or equal than 0.8.

35. (New) The composition of claim 32, wherein R_1 of the general formula V comprises one more SH groups, one or more $N(R^*)_2$ groups or a combination thereof, wherein R^* is hydrogen or alkyl.

36. (New) The composition of claim 25, wherein said condensing is carried out in the presence of a condensation catalyst, wherein the condensation catalyst is triethylamine, NH_4F or alkaline earth hydroxide.

37. (New) The composition of claim 25, wherein Ar of said organically modified silanediols of the general formula I is a substituted aromatic group.

38. (New) The composition of claim 25, wherein Ar of said organically modified silanediols of the general formula I is a phenyl, naphthyl or styryl group.

39. (New) The composition of claim 25, wherein R of said silanes of the general formula II comprises one or more acryl groups or one or more metacryl groups.

40. (New) The composition of claim 25, wherein said one or more double bonds of said radical R of said silanes of the general formula II are one or more double bonds of an acryl or a methecryl group.

41. (New) A material comprising the composition of claim 25, wherein said material is photostructurable in layers of a thickness of 1 to 150 μm.

42. (New) The material of claim 41, wherein said material is stable in storage.

43. (New) The material of claim 41, wherein said material is NIR permeable.

44. (New) A method for producing photocurable sililic acid polycondensates, comprising

(a) condensing one or more organically modified silanediols of the general formula I

$Ar_2Si(OH)_2$ (I)

with one or more organically modified silanes of the general formula II

$RSi(OR')_3$ (II)

in the presence of a base without adding water, wherein a molar ratio of said silanediols of the general formula I to said silanes of the general formula II is 1:1, wherein up to 90 mole percent of said silane of the general formula II is optionally replaced by one or more co-condensable compounds selected from the group consisting of boron compounds, aluminum compounds, silicon compounds, germanium compounds, titanium compounds and zirconium compounds, and wherein

Ar is a radical comprising 6 to 20 carbon atoms and one or more aromatic groups,

R is an organic radical comprising 2 to 15 carbon atoms and one or more epoxy groups or one or more C=C double bonds,

R' is methyl or ethyl; and

(b) adding a photoinitiator.

45. (New) A sililic acid polycondensate produced by condensing one or more organically modified silanediols of the general formula I

$Ar_2Si(OH)_2$ (I)

with one or more organically modified silanes of the general formula II

$RSi(OR')_3$ (II),

wherein said condensing is performed without adding water, wherein said silanediols of the general formula I to said silanes of the general formula II is 1:1, wherein up to 90 mole percent of said silane of the general formula II is optionally replaced by one or more co-condensable compounds selected from the group consisting of boron compounds, aluminum compounds, silicon compounds, germanium compounds, titanium compounds and zirconium compounds, and wherein

Ar is a radical comprising 6 to 20 carbon atoms and one or more aromatic groups,

R is an organic radical comprising 2 to 15 carbon atoms and one or more epoxy groups or one or more C=C double bonds,

R' is methyl or ethyl.

46. (New) A material comprising the sililic acid polycondensate of claim 45, wherein said material is photostucturable in layers of a thickness of 1 to 150 μm.

47. (New) A method for producing sililic acid polycondensates, comprising condensing one or more organically modified silanediols of the general formula I

$Ar_2Si(OH)_2$ (I)

with one or more organically modified silanes of the general formula II

$RSi(OR')_3$ (II),

wherein said condensing is performed without adding water, wherein said silanediols of the general formula I to said silanes of the general formula II is 1:1, wherein up to 90 mole percent of said silane of the general formula II is optionally replaced by one or more co-condensable compounds selected from the group consisting of boron compounds, aluminum

compounds, silicon compounds, germanium compounds, titanium compounds and zirconium compounds, and wherein

Ar is a radical comprising 6 to 20 carbon atoms and one or more aromatic groups,

R is an organic radical comprising 2 to 15 carbon atoms and one or more epoxy groups or one or more C=C double bonds,

R' is methyl or ethyl.